

**Kelly Ranch**  
**Habitat Conservation Area**  
(CNLM No: S024)  
(USFWS: 2006B0005)

**Annual Work Plan**  
October 2012- September 2013

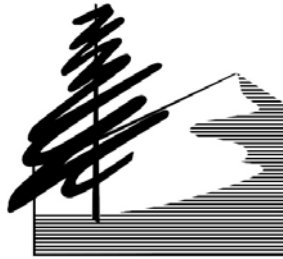
*Prepared for:*

**U.S. Fish and Wildlife Service**  
Attn: David Zoutendyk  
6010 Hidden Valley Road  
Carlsbad, CA 92009

**California Department of Fish and Game**  
Attn: David Mayer  
3883 Ruffin Road  
San Diego, CA 92123

**City of Carlsbad**  
Attn: Mike Grim  
1635 Faraday Avenue  
Carlsbad, CA 92008

*Prepared by:* Patrick McConnell, San Diego Preserve Manager  
*Reviewed by:* Markus Spiegelberg, San Diego Regional Preserve Manager



Center for Natural Lands Management  
27258 Via Industria, Suite B  
Temecula, CA 92590

(760) 731-7790  
[www.cnlm.org](http://www.cnlm.org)

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## **TABLE OF CONTENTS**

I. Introduction and Summary .....	1
II. Management Activities.....	2
A. Capital Improvements .....	2
B. Biological Monitoring .....	2
C. Habitat Maintenance.....	4
D. Public Services .....	4
E. Reporting .....	5
F. Office Maintenance.....	6
G. Operations .....	6
III. Workloads and Budgets .....	6
IV. References .....	6

## **TABLES**

Table 1. Schedule of Surveys 2012-2013 .....	2
Table 2. Sensitive plants present and threats 2012-2013 .....	5

## **APPENDICES**

Appendix 1. Task Schedule 2012-2013 .....	9
Appendix 2. HCA Location Maps .....	10

## **I. Introduction and Summary**

This work plan has been developed from the guidelines for goals and objectives set forth in the Kelly Ranch Habitat Conservation Area (HCA) Management Plan (HMP) dated April 2008 (CNLM 2008). The Management Plan includes management requirements as agreed to by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG), and additional management activities that the Center for Natural Lands Management (CNLM) feels is appropriate to protect and maintain the natural resources in perpetuity. CNLM holds a conservation easement (since February 2002) on the Kelly Ranch Habitat Conservation Area (HCA) and performs or oversees the tasks identified in the management plan.

The purpose of this work plan is to identify the tasks and budget required to complete the management activities for the upcoming management year that will begin on October 1, 2012 and end on September 30, 2013. Unless otherwise stated, all tasks will be performed by Preserve Manager Patrick McConnell.

### **Summary of Tasks and Goals for the Management Year:**

- Note all sensitive animal species observed
- Perform surveys for coastal California gnatcatcher (*Polioptila californica californica*)
- Perform habitat assessment and continue population studies on Orcutt's hazardia (*Hazardia orcuttii*)
- Perform habitat assessment on the two localities of Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*) and the cliff spurge (*Euphorbia misera*) locality
- Map sensitive annual plant species as necessary
- Remove natal grass (*Melinis repens*), Veldt grass (*Ehrharta* sp.), Saharan mustard (*Brassica tournefortii*), and Pampas grass (*Cortaderia selloana*).
- Remove lower kiosk and bench, place fencing at this location
- Update upper kiosk
- Patrol and conduct site enforcement on a regular basis
- Report conservation easement for compliance to conservation values
- Report and describe data collected and management actions taken on the HCA to the wildlife agencies
- Update the HCA Habitat Management Plan
- Provide an accounting of funds to be spent in the management year

Appendix 1 (*2012-2012 Task Schedule*) identifies the approximate schedule of tasks for the upcoming management year. The location of the HCA is shown in Appendix 2.

## II. Management Activities

The following sections identify and describe the activities to be performed during this management year. Based upon the Property Analysis Record (PAR) developed by CNLM to outline long-term management tasks and costs, management activities for the HCA can be broken down into seven tasks: Capital Improvements, Biological Surveys, Habitat Restoration, Public Services, Reporting, Office Maintenance, and Operations. Each of these categories will be discussed below.

### A. Capital Improvements

CNLM would like to have the lower kiosk, located at the cul-de-sac at the northern end of Whitman Way, removed. This area is a constant source of trash and trampling in the small section of coastal sage scrub present downhill and adjacent to these “improvements.” Spyglass Hills HOA is responsible for over-site of the bench or kiosk. They will be asked to remove it. CNLM received approval by the City of Carlsbad to remove the kiosk and bench. Additionally, the upper kiosk will have materials replaced and updated.

### B. Biological Monitoring

Monitoring activities will continue over the next management year (Table 1). See Kelly Ranch HCA Management Plan (CNLM 2008) for details of habitat assessment methods. Monitoring during the next year will mostly include habitat assessments on habitat containing wart-stem lilac and Orcutt’s hazardia. Other searches and rare plant mapping will take place as described below. All data on location and counts will be entered or stored in a Geographic Information System (GIS) database. A brief description of monitoring activities outlined by taxa is provided below:

#### 1. Sensitive Plant Species Surveys

We will count and map any occurrences of small-flower microseris, which was found while performing Orcutt’s hazardia habitat assessment during spring 2011.

#### 2. Habitat Assessments Included in this management year will be habitat assessments for sensitive species known to occur on the HCA (Table 1).

**a. *Del Mar manzanita* habitat assessments** Each locality will be assessed using a similar method used for wart-stem lilac (CNLM 2011). A CNPS combination rapid assessment/releve’ form will be used to note cover by species, threats, and counts of Del Mar manzanita at each of the two sites (see also CNLM 2008).

**b. *Orcutt’s hazardia*** Surveys will continue to include assessments of the transplanted Orcutt’s hazardia, and will encompass counts of adult transplants as well as recruitment studies (see below). See CNLM 2011 for more information on counts and pattern for Orcutt’s hazardia measures. We will continue to gather point-

intercept data for cover by species and for edaphic cover conditions.

**Table 1. Survey history and schedule 1998-2013**

<b>Name and Sensitivity</b>	<b>1998 (Merkel &amp; Associates)</b>	<b>2003</b>	<b>2004-2008</b>	<b>2009-2012</b>	<b>2012-2013</b>
Del Mar manzanita ( <i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i> ) FE, CNPS List 1B.1, MHCP.	29 (probably ssp. <i>zacaensis</i> )	<50 located in dense habitat and difficult to count	Likely present	Identity as Del Mar manzanita verified by John Keeley (USGS) <sup>1</sup> At least 3 individuals, possibly more. Searched locality marked on north-facing slope during 2003 McMillan survey	Perform habitat assessments on the two localities
Wart-stem lilac ( <i>Ceanothus verrucosus</i> ) CNPS List 2.2, MHCP	“in the hundreds”	9		Most locations mapped, for a count of 618 individuals, one habitat assessment carried out late spring 2011, another in summer 2012.	
Small-flowered microseris ( <i>Microseris douglasii</i> var. <i>platycarpa</i> ) CNPS List 4.2	20	not found, probably impacted by development	Not found	Individuals located during late spring 2011, generally present amid middle portion of Orcutt’s hazardia site	Census and map
Western dichondra ( <i>Dichondra occidentalis</i> ) CNPS List 4.2	unknown	common	Several populations found	Several found and mapped	
Palmer’s grapplinghook ( <i>Harpagonella palmeri</i> ) CNPS List 4.2	???	Approximately 400	Over 100 individuals 2006 Two areas found Censused and mapped 1203 counted, an additional 550 estimated 2008		
Orcutt’s hazardia ( <i>Hazardia orcuttii</i> ) CT, CNPS list 1B.1 MHCP	none	20 (transplanted from the Manchester HCA)	100 planted in 2004, Approximately 100 censused 2005 106 adults, 3 seedlings 2007 100 adults, 17 seedlings, 1 juvenile 2008	Annual recruitment and survival of seedlings leading to one recruit transitioning to adult during 2012	Continue size class transition studies and cover by species
Nuttall’s scrub oak ( <i>Quercus dumosa</i> ) MHCP, CNPS List 1B.1	??? (“lightly scattered”)	common	11 mapped 2008	13 mapped	
Cliff spurge ( <i>Euphorbia misera</i> ) MHCP, CNPS List 2.2	“one thicket”	3	Approximately 16 censused & mapped 2008		Census and search for seedlings
California boxthorn ( <i>Lycium californicum</i> ) CNPS List 4.2			Two stands found & mapped 2008		

FE= Federally listed endangered; CT= California threatened; MHCP= Multiple Habitat Conservation Program Covered Species; CNPS= California Native Plant Society listing criteria; ???= no initial count made during planning process.

<sup>1</sup> SDNHM is the San Diego Natural History Museum. Vouchers were given to SDNHM in May 2009, and these have not been verified to date. Keeley et al. (2007) published the most recent systematic treatment for *Arctostaphylos glandulosa*, and has verified collections submitted to him as meeting our taxonomic determinations

**c. Orcutt's hazardia population studies** Transplanted hazardia will continue to be censused. Seedlings will be counted and a size class category will be applied to each. Size classes are: seedling, juvenile (greater than 1 year old), or adult (flowering). Demography measures may aid in producing a population viability model.

**d. Cliff spurge habitat assessment** The population will be counted and counts will be segregated according to whether there are any seedlings, or apparent seedlings, and a habitat assessment will take place as described above for Del Mar manzanita.

No other biological monitoring activities are planned for the management year, aside from incidental wildlife mapping while carrying out other tasks.

### **C. Habitat Maintenance**

This management year, as with last year, our primary objectives will be the eradication of Natal grass and Saharan mustard. Yearly control efforts have been ongoing for both species. Several years of aggressive removal of Sahara mustard appear to have virtually eradicated this forb from the HCA, but there may be small infestations inside the northern section where two consecutive years of removal has taken place. Infestations found in any location will be noted and removed as soon as possible. Pampas grass will be found and killed during the late summer months, as they make themselves more apparent by flowering. A few Veldt grass (*Ehrharta calycina*) continue to be found in an area nearby one of the Del Mar manzanita localities, and we will find and destroy these. The priority weeds for removal will remain those mentioned above, as they pose a much more imminent threat to the viability of the HCA than weeds like tree tobacco. Our ultimate goal for all those listed above is eradication.

### **D. Public Services**

Public service activities include the patrolling of the HCA, consulting with neighbors and the Home Owners Association (HOA) about perimeter landscaping and responding to emergencies. However, other opportunities for public service may be forthcoming during the year with local groups and individuals interested in volunteering labor for HCA projects (as mentioned in the previous section), and class field trips from local schools.

- 1. Patrols** Patrols will be performed approximately two to four times per month. Biological surveys, weed removal and other HCA activities tend to reveal emerging issues as effectively as patrol activities. Routine trash removal, fence and sign repair are the main tasks during patrol. Observations of sensitive species, and new human impacts will be noted during patrols.
- 2. Emergency Response** Staff time has been allocated from the current budget for response to emergencies on the HCA. Such emergencies could include response to wildfires, wildlife problems reported by neighbors and illegal trespass.

**Table 2. Sensitive plants present and threats**

<b>Name</b>	<b>Threats</b>	<b>Actions Planned</b>
Del Mar manzanita FE, CNPS List 1B.1, MHCP.	Natal grass Veldt grass Human disturbance	*Grass control will take place throughout HCA Frequent patrol
Wart-stem lilac CNPS List 2.2, MHCP	Fire Human disturbance	Frequent patrol
Small-flowered microseris CNPS List 4.2	Saharan mustard Human disturbance	All Saharan mustard found will be hand-pulled, Frequent patrol
Western dichondra CNPS List 4.2	Saharan mustard Human disturbance	All Saharan mustard found will be hand-pulled, Frequent patrol
Palmer's grapplehook CNPS List 4.2	Saharan mustard Human disturbance	All Saharan mustard found will be hand-pulled, Frequent patrol
Orcutt's hazardia CT, CNPS list 1B.1 MHCP	Saharan mustard Other shrubs Human disturbance	Any threats deemed to decrease recruitment will be controlled
Nuttall's scrub oak MHCP, CNPS List 1B.1	Human disturbance	Frequent patrol
Cliff spurge MHCP, CNPS List 2.2	Fire Natal grass Veldt grass Human disturbance	Frequent patrol Grass control will take place throughout HCA
California boxthorn CNPS List 4.2	Fire Natal grass Veldt grass Human disturbance	Frequent patrol Grass control will take place throughout HCA

\*Grass refers to the two species of South African origin presently on HCA: Natal and Veldt grass

## **E. Reporting**

Reporting requirements include the management of the HCA's database/GIS system, the photo-documentation stations, and the production of various status reports to the USFWS, CDFG and CNLM administration.

- 1. Database/GIS Management** Data derived from routine patrols and photo-documentation will be entered into and maintained in the HCA's existing database/GIS system. Additional databases will be established for the various biotic monitoring programs including the production of historical and current vegetation maps.
- 2. Reports**

***Year-End/Agency Reports*** By the end of December 2013, a year-end report will be prepared by the HCA manager detailing the results of the year's management activities. This report will include recommendations for the continuation of various activities for the following management year and will be submitted to the USFWS and CDFG as required under permit reporting conditions.

***Annual Work Plan*** The work plan for the 2013-2014 management year will be formulated by the end of the 2012-2013 management year and will be based upon experiences during previous years' operations. This work plan will be submitted to the USFWS and CDFG.
- 3. Conservation Easement (CE) Compliance**

The HCA Manager will monitor compliance of all areas of the Conservation Easement to ensure the conservation values are maintained in perpetuity. Center practices for monitoring and reporting on CEs is derived from the CE agreement, CNLM's CE enforcement policy, and Land Trust Alliance standards (through which CNLM is an accredited land trust). A baseline report is prepared on a preserve, or on the portion where the CE exists, and then annual monitoring (or as often as stipulated in the CE) occurs to document any changes in the baseline condition. This process insures CE's are being managed appropriately, and ensures continuity of process. Compliance visits are to be carried out during the later portion of the management year, and will be appended to each year's annual report.

## **F. Office Maintenance**

HCA management will maintain offices in an organized manner to facilitate maximum efficiency. This section of the budget includes funds for general office work, utilities, and telephones, among other items/tasks.

## **G. Operations**

Operations include the training and professional growth of CNLM personnel, and inspection of the HCA by CNLM administration. Funds have been allocated in the current budget for the HCA Managers to attend classes or seminars during the 2012-2013 year. Also included within this category of activity is the conduction of employee reviews.

# **III. Workloads and Budgets**

## **1. Supervision and Staffing**

The Regional Preserve Manager will be supervised by CNLM's Director of Science, Dr. Deborah Rogers. Tasks and priorities will be coordinated by the Regional Preserve Manager and approved by Dr Rogers. The Regional Preserve Manager, Markus Spiegelberg will supervise the HCA Manager Patrick McConnell. Additionally, Dr. Rogers will assist with document review and scientific research conducted on CNLM preserves.

## **2. Budgeting**

A total budget of \$13,472 has been allocated for this management year and is included here as Appendix 2. Every effort will be made by the Center to allocate time and expenses according to this estimated budget.

# **IV. References**

CNLM. 2011. Kelly Ranch Habitat Conservation Area Annual Report. December, 2011.



CNLM. 2008. Habitat Management Plan for the Kelly Ranch Habitat Conservation Area. April, 2008.

## **APPENDICES**

## Appendix 1. Task Schedule

<b>Task</b>	<b>October- December 2012</b>	<b>January-March 2013</b>	<b>April to June 2013</b>	<b>July to September 2013</b>
<b>Nonnative Plant Removal</b>	X	X	X	X
<b>Sensitive Plant Surveys</b>		X	X	
<b>Habitat Assessments</b>		X	X	
<b>Orcutt's Hazardia Population Studies</b>				X
<b>GIS/Database</b>	X		X	
<b>Patrolling</b>	X	X	X	X
<b>Update kiosk</b>	X			
<b>Remove lower kiosk</b>	X			
<b>Reports</b>				X

## **Appendix 2. HCA Location Maps**

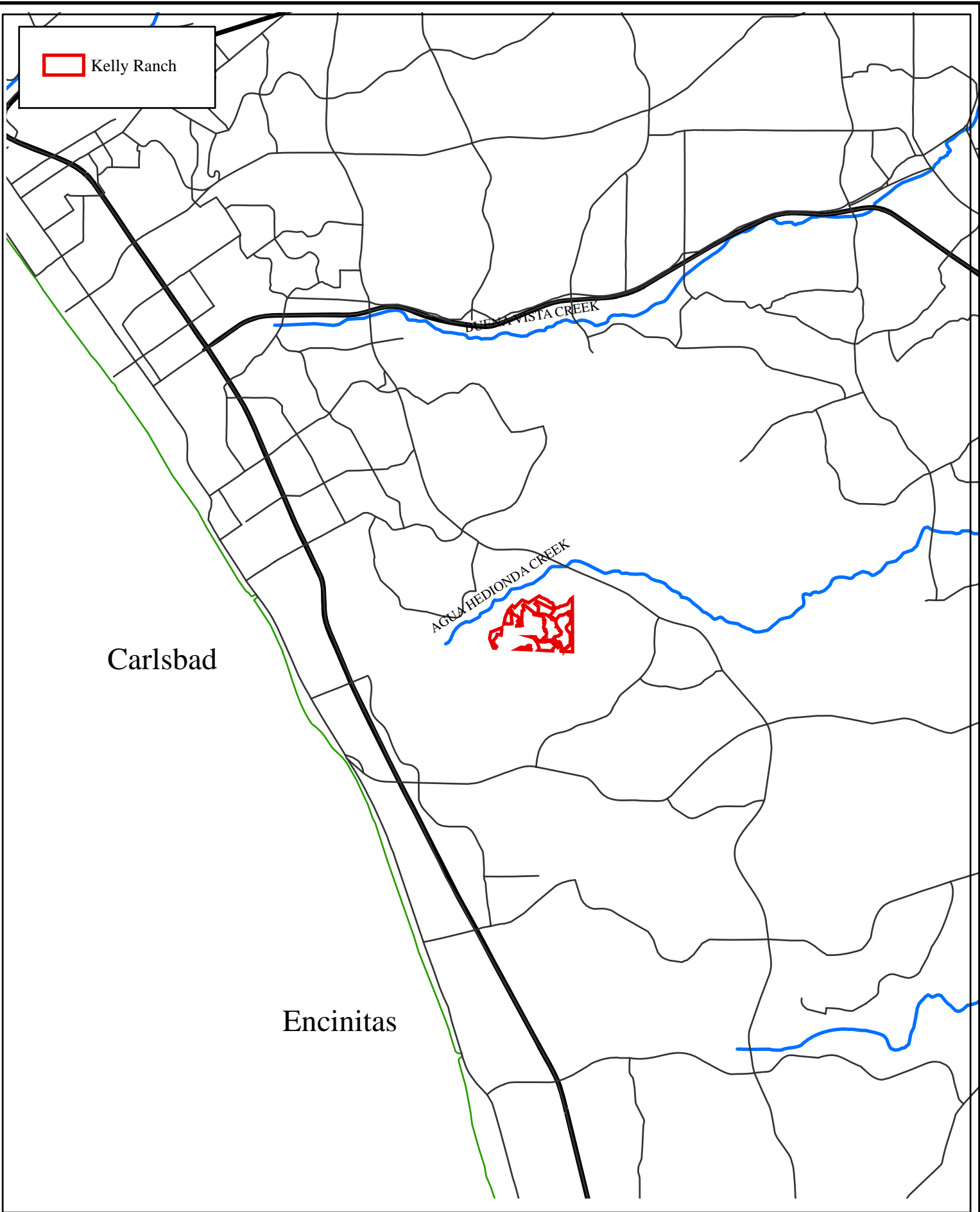


Figure 1  
Preserve Vicinity  
Kelly Ranch Habitat Conservation Area - Carlsbad, CA







Figure 2  
Preserve Location  
Kelly Ranch Habitat Conservation Area - Carlsbad, CA

